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DEPARTMENT OF THE AIR FORCE

THE DEAN OF THE FACULTY

USAFA ACADEMY, COLORADO 80840

REPLY TO

ATIN OF: DFCBS-R (2720)

5 Aug 1977

SUBJECT: Trip Report, NCBC, Gulfport, MS, 27-29 July 1977

to: DFCBS-R (LtCol Sampson) *of*
DFCBS (LtCol Payne) *CAP*
DFCBS (LtCol Meier) *VM*
DFTBS (Col Lamb) */*
AN TUREN

1. The undersigned participated with Capt Alvin Young, QMIE, Kelly AFB, in a TDY to the Naval Construction Battalion Center (NCBC), Gulfport, MS. The inclusive dates of the TDY were 27-29 July 1977. The objectives of this trip were to survey the former herbicide storage site for possible reclamation and decontamination, collect soil samples for microbial and chemical analyses, and brief the Base Commander on proposed decontamination procedures and/or monitoring of pesticide and microbial levels.

2. The Naval Construction Battalion Center has until June 1977 maintained a large portion of the inventory of military herbicide. All herbicide stored at Gulfport has been moved out for disposal elsewhere. In support of AFSC site reclamation efforts the former storage site was surveyed for areas of herbicide spillage, character and composition of soils, and other factors pertinent to recommending a procedure for returning the site to a usable condition. In order to conduct a meaningful monitoring program on-site, 12 soil samples were taken from carefully selected locations. These soil samples were placed in glass collection jars for chemical analysis (by the USDA Environmental Monitoring Laboratory at Gulfport) and microbial analysis (by the Dept of Chemistry and Biological Sciences, USAFA). Samples were chosen from three characteristic locations; areas with no visually detectable spillage and no herbicide odor (designated 0/0), areas of light spillage and light herbicide odor (designated L/L), and areas of heavy spillage and pronounced herbicide odor (designated H/H). In addition, notes were made on ground characteristics associated with each sample (e.g., presence of asphalt, sand, vegetation, shell, hardpan, or gravel, whether collected from ditchbank or ditchbottom). In order to facilitate immediate relocation without driving stakes, sampling sites were marked using a technique combining compass heading and distance from a fixed point in the approximate center of the area. All samples were taken from the top 2 inches early in previous work has shown that only trace concentrations of herbicide exist below that level. Controls were selected from an area close to the storage site where no herbicide had been spilled. Additional soil samples will be taken from an area presently underneath stacks of crushed metal drums which had contained the herbicide and which still have not been removed from the storage site. These drums are due to be removed by 31 August 1977 and every effort will be made to obtain the samples as soon thereafter as possible. In addition, present protocol calls for at least three additional samplings over the

next year to observe changes in 2,4-D, 2,4,5-T, TCDD, and microorganism levels. It was determined that this procedure would provide the Base Commander with the information of greatest value in judging when to return the area to active use.

3. Although the Base Commander, Capt Taylor, was not available for consultation and briefing, several sessions were held with his representative, Mr Claude Anderson, Base Management Engineer. Mr Anderson, in turn, briefed Capt Taylor on our activities and conveyed to us the Commander's pledge of complete cooperation and support. Capt Taylor was particularly interested in our microbial assessment of the site based on samples collected by Maj Thalken of DFCBG in January 1977. Local citizen press reports have quoted mass media articles which allege that military herbicides will cause sterilization of soil, completely destroying the normal flora. Our data (and data from previous UCMA herbicide studies) give no credence whatever to such statements and Capt. Taylor was happy to have a formal research report in hand to counter this erroneous belief.

4. Funds for this TDY have been provided to DFCBG through Obligation Authority (APLC) S77-153 and totalled \$369.19.

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